

**Imperial Valley Study Group
Transmission Planning Collaborative
Meeting Minutes: June 30, 2005**

Attendees:

Frank Barbera - IID Energy	Jonathan Woldemariam – SDG&E
Juan C. Sandoval – IID	Robert Jackson – SDG&E
Mark Etherton – IID	Chris Terzich – SDG&E
Orlando Foote - IID	Rich Sheaffer – SDG&E
Mark Lieberman - LADWP	Abbas Abed - SDG&E
Richard Cabanilla - Imperial County Plng	John Kyei - CAISO
Tod O'Connor - Ormat	Jesse Ante - CPUC
Ken Bagley - CRT Committee	Dave Olsen – CEERT/CEC
Jim Caldwell – PPM Energy	Brewster Birdsall - Aspen Environmental
Michael Shames - UCAN	Lauren Weinstein - EPG
Malissa McKeith – LBBS Law	David Lawhead - State Parks
Tom Mancini – Sandia National Lab	Jim Kritikson - consultant
Mark Skowronski – Inland Energy	Mike Evans - Coral Power
Doug Obal – Stirling Energy Systems	Jose Santamaria - CFE

The meeting convened at 1:00 PM at the San Diego Association of Governments (SANDAG) in San Diego. Minutes were recorded by Dave Olsen.

Concentrating Solar Power: The IVSG addresses the export of renewable energy from the Imperial Valley and is not tied exclusively to geothermal generation development. About 20% of California's total solar resource is located in the Imperial Valley; a Sandia/NREL study estimates the solar generation potential there to be 181,000 MW. Dr. Thomas Mancini, Solar Thermal Technology Program Manager at Sandia National Laboratory, presented a briefing on Concentrating Solar Power (CSP) technology, its commercial generation potential in the Imperial Valley, and the factors driving the projected decline in the cost of energy from CSP generation. This presentation is posted on the IVSG website. Dr. Mancini and CSP developers in attendance projected that several hundred megawatts of CSP in the Imperial Valley could be brought on-line in the decade, 2010-2020. This schedule corresponds to the later phases of the IVSG development plan.

Report of the IVSG Steering Committee: Juan Carlos Sandoval of IID gave an overview of the IVSG's work on behalf of the Steering Committee. Based on on-going discussions with CalEnergy, the Steering Committee has accepted for planning purposes a target of three new geothermal plants, 645 MW, on-line by end-2010. Transmission planning work is now focused on how to phase the development of transmission to export 2,000 MW of renewable generation from the Imperial Valley. Phase 1 of this development would include the 645 MW of new geothermal power and about 400 MW of other renewable generation. Phase 1 could upgrade Path 42, in order to deliver the incremental power to the Devers substation (this routing designated as Phase 1a); or could upgrade IID's Highline-El Centro-Imperial Valley lines, to deliver the power to the Imperial Valley substation (this routing designated as Phase 1b). Phase 2

would consist of whichever of the routings is not upgraded in Phase 1; this would bring total export capacity to about 1,600 MW. Phase 3 would bring export capacity to 2,000 MW.

The Steering Committee has decided that the increments of new transmission should be studied at a conceptual level rather than at a more detailed System Impact Study level. It has requested the IVSG Technical Work Group to study the impacts of Phase 1a and Phase 1b power flows on the SCE and SDG&E systems.

Report of the IVSG Technical Work Group: Mark Etherton summarized the stability studies performed on the IVSG's three final alternatives. These studies looked at outages on key facilities on the IID, CFE, SDG&E, SCE, WAPA and MWD systems, and were run for both the Heavy Summer and the Light Autumn cases. The results appear to be well within planning margins. Robert Jackson reviewed the post-transient study the TWG is now completing and explained the need to study voltage decline and collapse scenarios in transmission planning. Preliminary post-transient study results show the study alternatives perform well; a full analysis will be available by the next IVSG meeting.

Permitting Work Group: Carrie Downey, chair of the Permitting Work Group (PWG) could not attend; in her absence, Lanny Foote (of Horton, Knox, Carter & Foote, representing IID) gave the PWG report. The PWG has worked to inform all county, state and federal agencies and other potentially affected parties of the IVSG study and development plan. It is important for the agencies to understand the potential for major generation and transmission development in the region, and to identify possible impacts and concerns that such development may have to address as early as possible. Malissa McKeith of LBBS Law asked if any environmental justice groups are participating; none have to date, although representatives of the Sierra Club and other environmental groups have participated in all PWG meetings. Dave Olsen emphasized that the intent of the IVSG and the PWG in particular is to seek out people and groups opposed to or concerned about the potential development and to encourage their participation, in order to broaden the IVSG's collective thinking about the development and provide the most opportunity to accommodate such concerns. He requested Ms. McKeith and others to contact environmental justice groups as well as other potentially concerned parties in the region and invite them to participate in the IVSG to this end.

BLM (El Centro and Palm Springs offices) has been responsive and has committed resources to the IVSG study. The PWG will determine whether the CDCA has to be amended in order to accommodate upgrades of existing transmission corridors and/or designation of new corridors. Imperial County will need to update the Geothermal and Transmission Element in its General Plan prior to any new or upgraded transmission lines being constructed within the County.

The mission of the Permitting Work Group is to design a permitting plan that, to the extent possible, enables the entire multi-year generation/transmission development to be studied and approved as one large, phased project. The legislative requirements for RPS implementation, and the difficulty of siting new transmission have led the CPUC, CEC and other state agencies to welcome new approaches capable of consolidating and expediting necessary approvals.

So while the PWG's work may help lay the groundwork for permit applications by IID, SDG&E and/or SCE, its most important outcome may be its recommendation for a new, streamlined study and approval process.

Minutes of the April 12, 2005 meeting were approved as amended. Bill Powers of the Border Power Plant Working Group requested (via e-mail) that the e-mail exchange about the April 12 meeting minutes among Mr. Powers, Frank Barbera of IID, Robert Jackson of SDG&E, Jim Kritikson representing Coral Power and Dave Olsen be added to the official record of that meeting. This exchange concerned the selection of IVSG study alternatives and especially Path 45 through Mexico as an option. All people on the IVSG distribution list as of April 12 were copied on this exchange. The Study Group agreed to amend the April 12 minutes to include this e-mail exchange. The amended minutes will be posted on the IVSG website, www.energy.ca.gov/ivsg/.

Next IVSG Meetings: The next meetings of the full Study Group are scheduled for:

- August 10, 2005, 1:00 – 4:00 PM, at Sempra HQ Auditoriums 2-3 (101 Ash Street) in San Diego.
- September 15, 2005, 1:00 – 4:00 PM, San Diego location to be determined.

The meeting was adjourned at 3:30 PM.